

FIG. 1

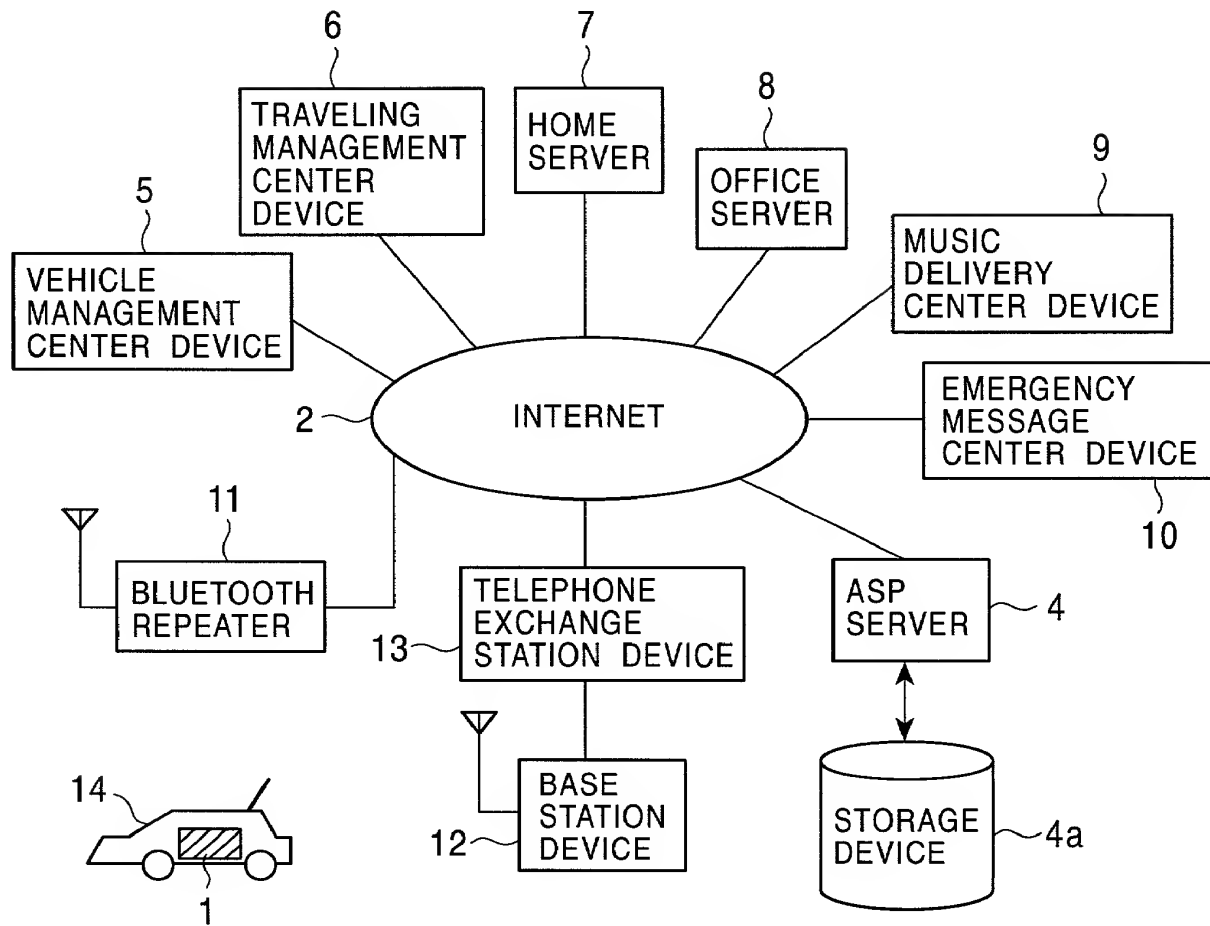


FIG. 2

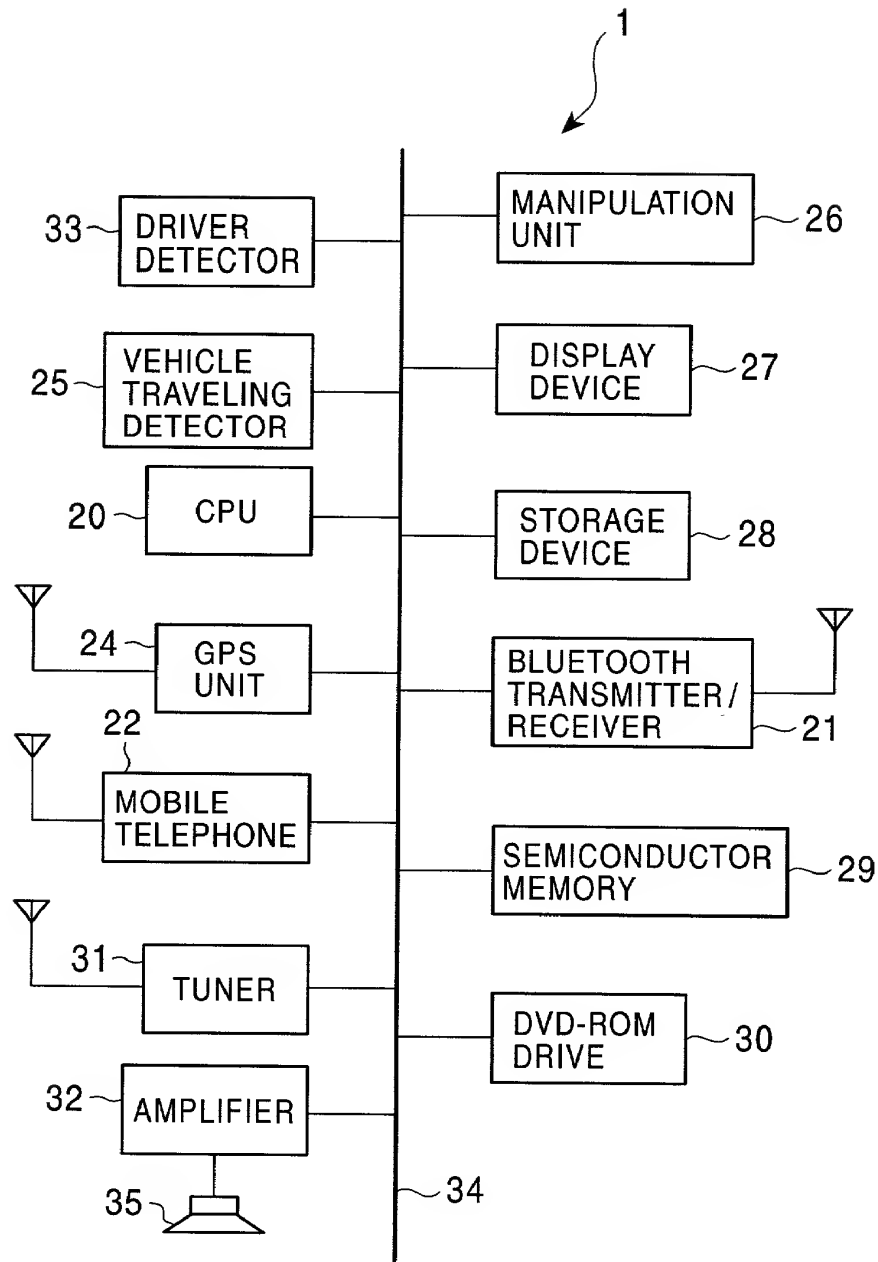


FIG. 3

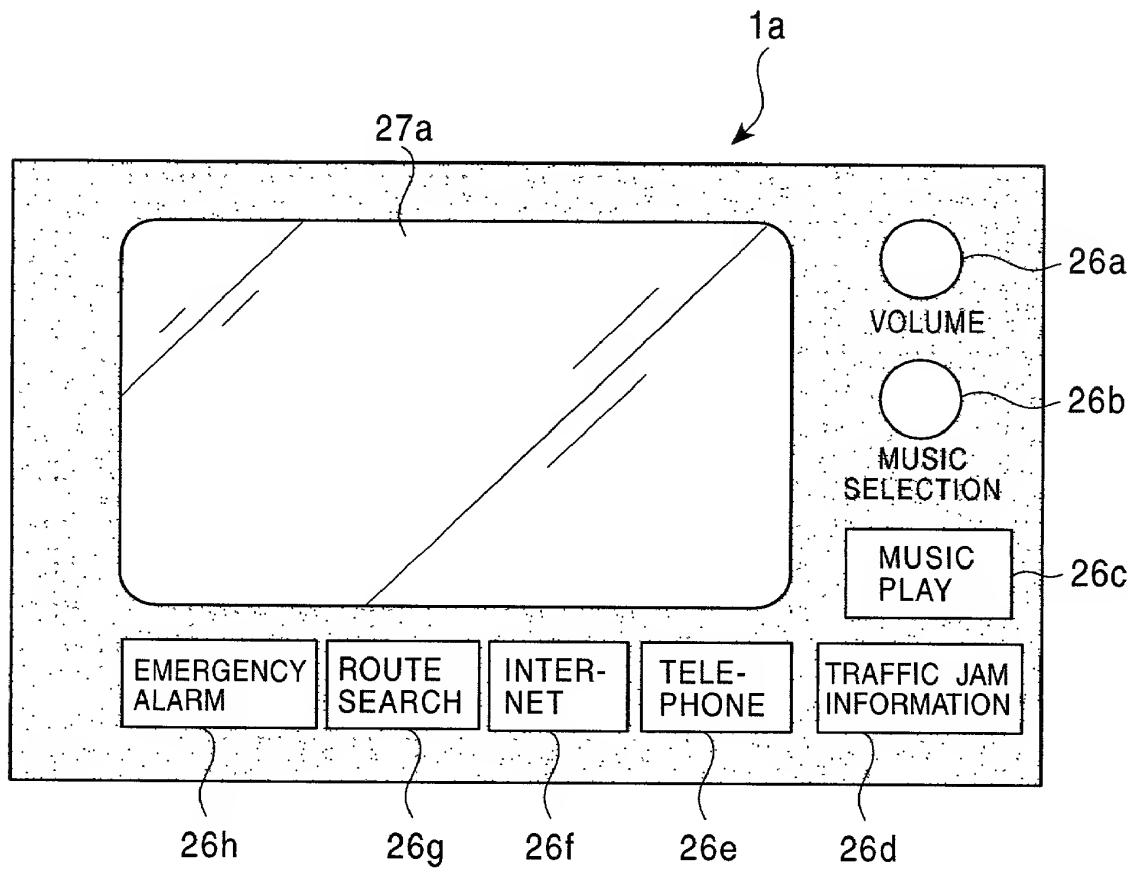


FIG. 4A

MUSIC PLAY

INTERNET RADIO
MP3 DATA
GROUND WAVE

RETURN

FIG. 4B

TRAFFIC JAM
INFORMATION

RADIO
INTERNET
VICS
PREDICTION FROM PAST DATA
ATIS
SPEEDWAY PUBLIC CORPORA-
TION GUIDE

RETURN

FIG. 4C

TELEPHONE

CONTACT ADDRESS LIST

RETURN

FIG. 4D

ROUTE SEARCH

DEPARTURE
DESTINATION
DATE AND TIME
LOCATION
CONDITION
PAST RECORD

RETURN

FIG. 4E

EMERGENCY ALARM

ACCESS POINT
EMERGENCY CENTER
AMBULANCE
POLICE
INSURANCE COMPANY
REPAIR SHOP

RETURN

FIG. 5A

CAR PROFILE DATABASE

USER

PASSWORD

FIG. 5B

CAR PROFILE DATABASE

APPLICATION DATABASE
USER SETTING
UPDATE DATA

FIG. 5C

APPLICATION

TRAVELING MANAGEMENT
EMERGENCY ALARM
MUSIC DELIVERY
ANTI-THEFT
VEHICLE MANAGEMENT
PUBLIC TELEPHONE
ROUTE SEARCH
MAIL

FIG. 5D

DATA BASE

VEHICLE DATA
TRAVELING DATA
DRIVER DATA
MUSIC DATA
ADDRESS BOOK
MAP DATA

FIG. 5E

USER SETTING

SET ACCESS RIGHT
ADD NEW USER
CHANGE USER DATA
SET ACCESS POINT

FIG. 5F

UPDATE DATA

UNCONDITIONAL UPDATE
(DATA MOVE)
CONDITIONAL UPDATE
(DESTINATION)
CONDITIONAL UPDATE
(COMMUNICATION CONDITION)
ERASE (FORMAT)

FIG. 6A

TRAVELING MANAGEMENT

MAP

RETURN

FIG. 6B

EMERGENCY ALARM

SERVICE CENTER
COMMUNICATION
MAIL TRANSMISSION ADDRESS
SENT DATA :
VEHICLE, DRIVER DATA

RETURN

FIG. 6C

MUSIC DELIVERY
INTERNET RADIO

| CH | URL |
|----|-------|
| 1 | ***** |
| 2 | ***** |
| 3 | ***** |
| 4 | ***** |

PROGRAM RESER-
VATION
DATE AND TIME

* * URL
* * * * *

RETURN

FIG. 6D

ANTI-THEFT

CABIN TROUBLE SENSOR
TRAVELING REGION
USED TIME
DRIVER
CONTACT ADDRESS
SENT DATA :
VEHICLE, CURRENT POSITION,
ROUTE

RETURN

FIG. 6E

| | |
|---------------------------------------------|--|
| VEHICLE MANAGEMENT | |
| GAS SUPPLY | |
| DATE AND TIME, OIL SUPPLY, | |
| LOCATION, FUEL EFFICIENCY | |
| OIL EXCHANGE | |
| PARTS | |
| CHECK (MAINTENANCE INFOR- | |
| MATION) | |
| <input type="button" value="START ENGINE"/> | |
| <input type="button" value="START AIR"/> | |
| <input type="button" value="CONDITIONER"/> | |
| <input type="button" value="RETURN"/> | |

FIG. 6F

| | |
|--------------------------------------------|------------------------------------|
| ROUTE SEARCH | |
| DEPARTURE | <input type="button" value="MAP"/> |
| DESTINATION | |
| DATE AND TIME | |
| LOCATION | |
| CONDITION | |
| PAST INFORMATION | |
| <input type="button" value="SEND RESULT"/> | |
| <input type="button" value="TO VEHICLE"/> | |
| <input type="button" value="RETURN"/> | |

FIG. 6G

| | |
|---------------------------------------|---------|
| MAIL | |
| NAME | ADDRESS |
| **** | ***** |
| **** | ***** |
| **** | ***** |
| **** | ***** |
| <input type="button" value="RETURN"/> | |

FIG. 6H

| | |
|---------------------------------------|-----------|
| PUBLIC TELEPHONE | |
| NAME | TELEPHONE |
| **** | ***** |
| **** | ***** |
| **** | ***** |
| **** | ***** |
| <input type="button" value="RETURN"/> | |

FIG. 7A

| VEHICLE DATA | |
|---------------------------------------|--|
| BODY NUMBER | |
| COLOR | |
| MODEL | |
| OWNER | |
| MAINTENANCE INFORMATION | |
| <input type="button" value="RETURN"/> | |

FIG. 7B

| TRAVELING DATA | | | | |
|---------------------------------------|------|---------------|-------|----------------|
| CURRENT POSITION | | | | |
| EAST LONGITUDE ***** | | | | |
| NORTH LATITUDE ***** | | | | |
| DATE AND TIME | TIME | LOCA- TION | SPEED | CONDI- TION |
| ** | ** | ** | ** | ** |
| ** | ** | ** | ** | ** |
| <input type="button" value="RETURN"/> | | | | |

FIG. 7C

| DRIVER DATA | |
|---------------------------------------|--|
| NAME | |
| BLOOD TYPE | |
| SEX | |
| AGE | |
| HEIGHT | |
| WEIGHT | |
| COMMUNICATION | |
| <input type="button" value="RETURN"/> | |

FIG. 7D

| MUSIC DATA | | |
|-----------------------------------------|-------|----------|
| NO. | TITLE | DURATION |
| 1 | ***** | **** |
| 2 | ***** | **** |
| 3 | ***** | **** |
| 4 | ***** | **** |
| 5 | ***** | **** |
| 6 | ***** | **** |
| <input type="button" value="DOWNLOAD"/> | | |
| <input type="button" value="UPLOAD"/> | | |
| <input type="button" value="RETURN"/> | | |

FIG. 7E

| MAP DATA | |
|---------------------------------------|-----------------|
| MAP NAME | UPDATED DATE |
| SOUTH KANTO REGION | **,** |
| NORTH KANTO REGION | **,** |
| TOKYO METROPOLITAN | **,** |
| KAWASAKI CITY | **,** |
| SAITAMA PREFECTURE | **,** |
| NIIGATA PREFECTURE | **,** |
| <input type="button" value="RETURN"/> | |

FIG. 7F

| ADDRESS BOOK | | |
|---------------------------------------|-----------|---------|
| NAME | TELEPHONE | ADDRESS |
| ** | ** | **** |
| ** | ** | **** |
| ** | ** | **** |
| <input type="button" value="RETURN"/> | | |

FIG. 8

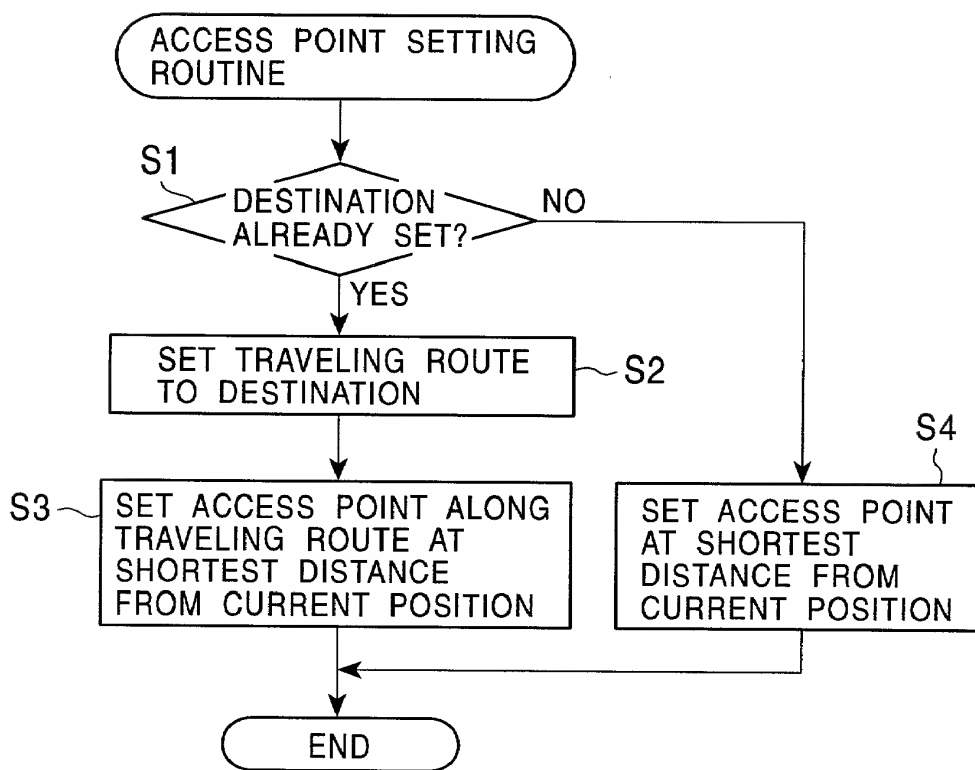


FIG. 9

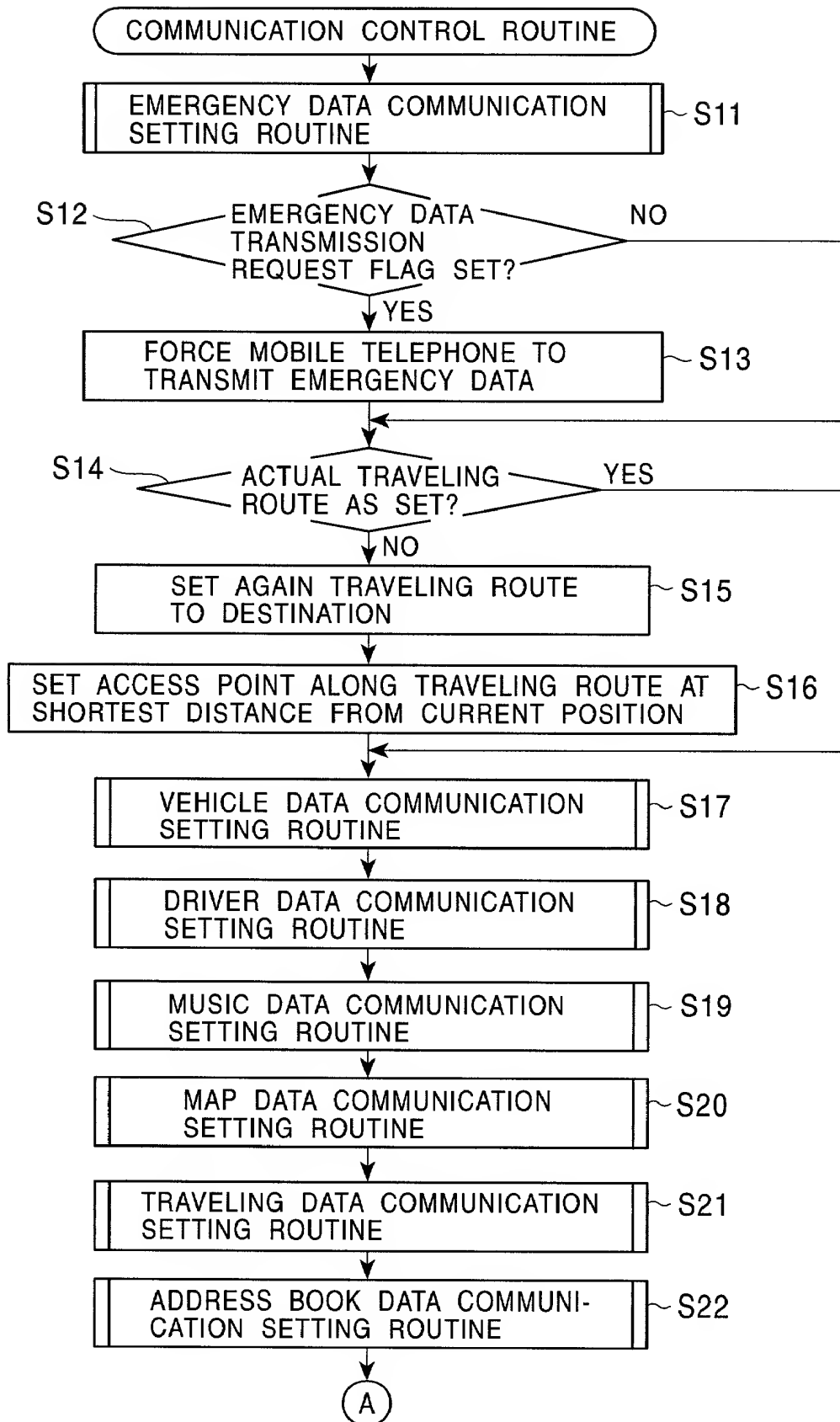


FIG. 10

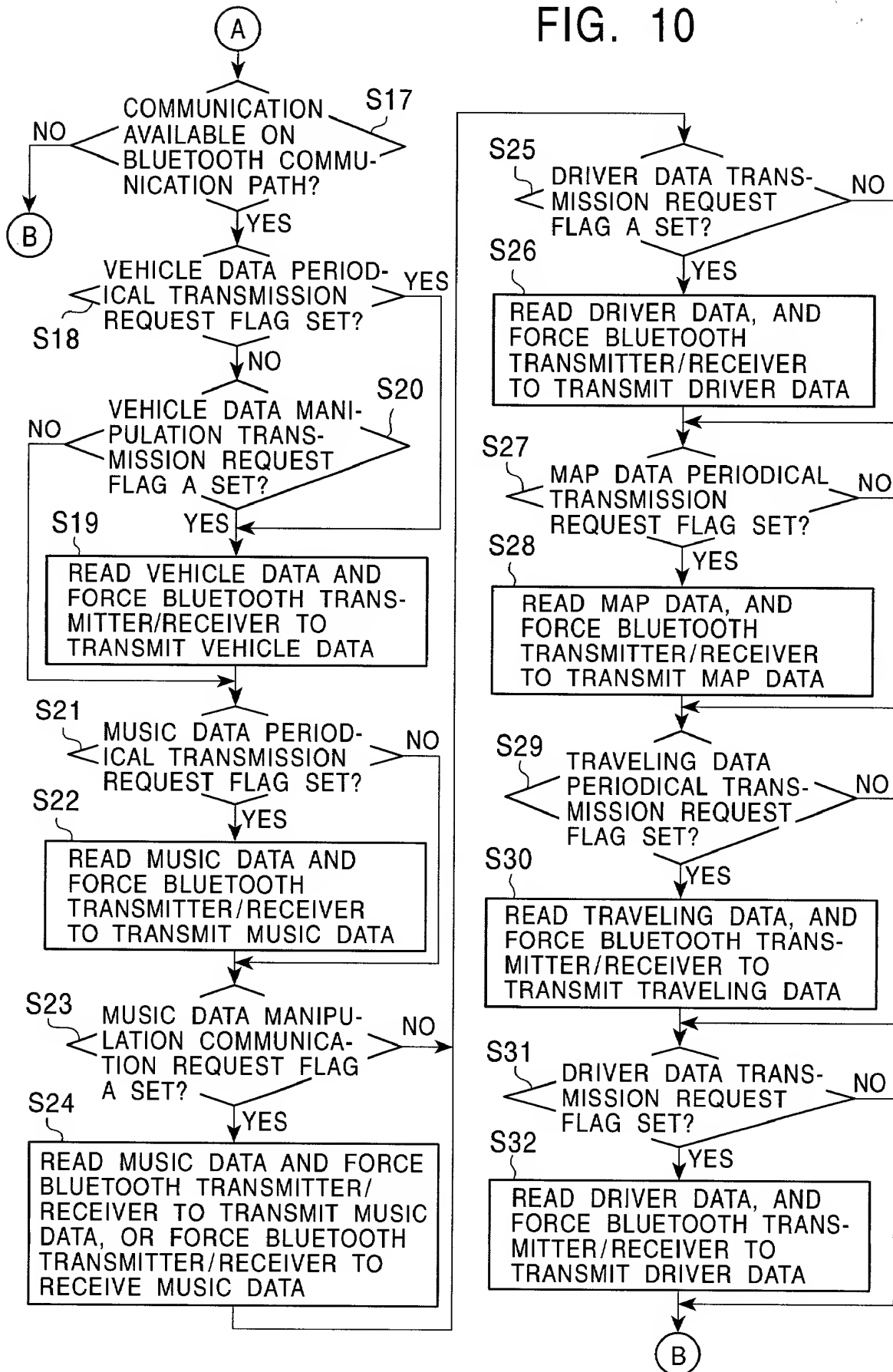


FIG. 11

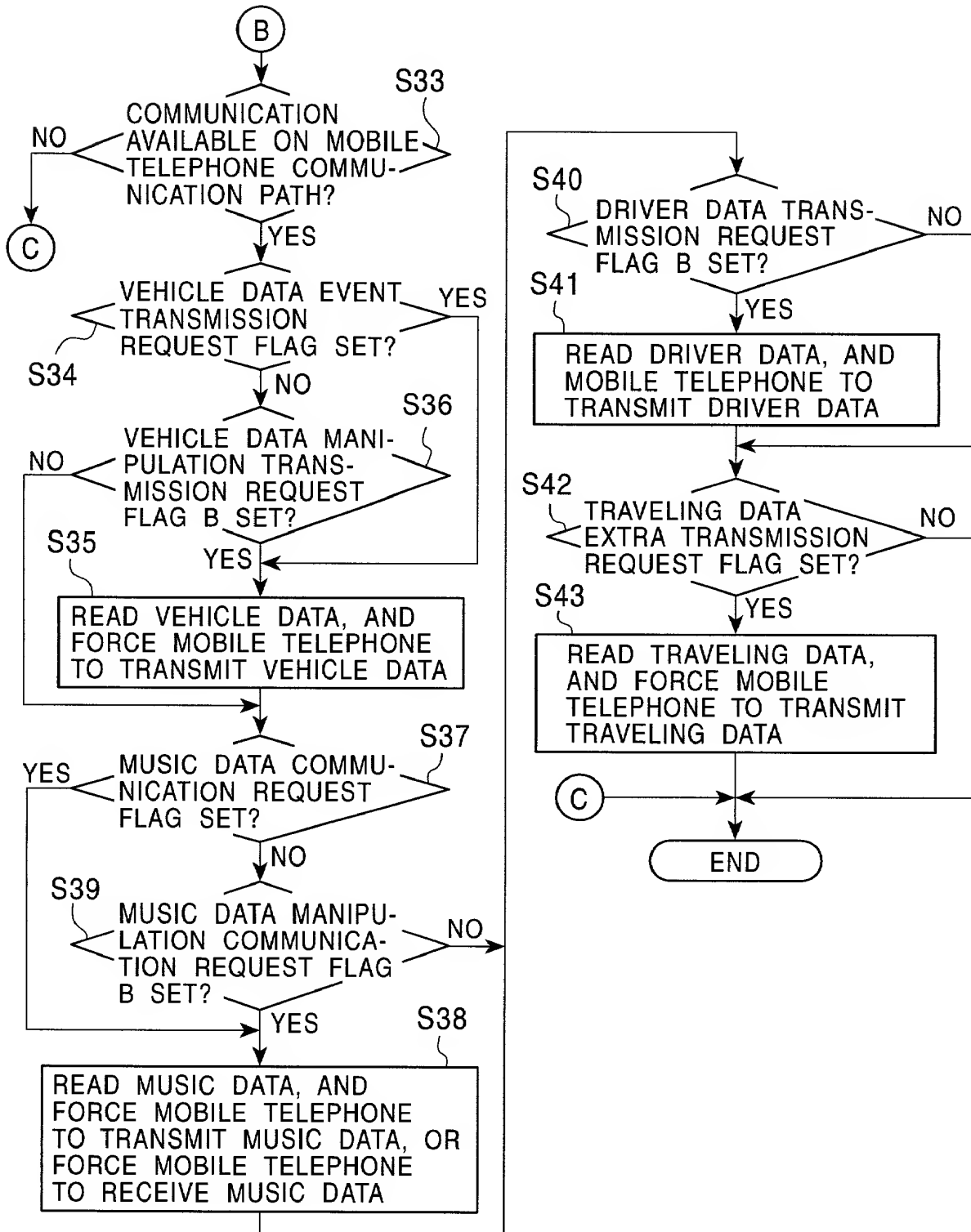


FIG. 12

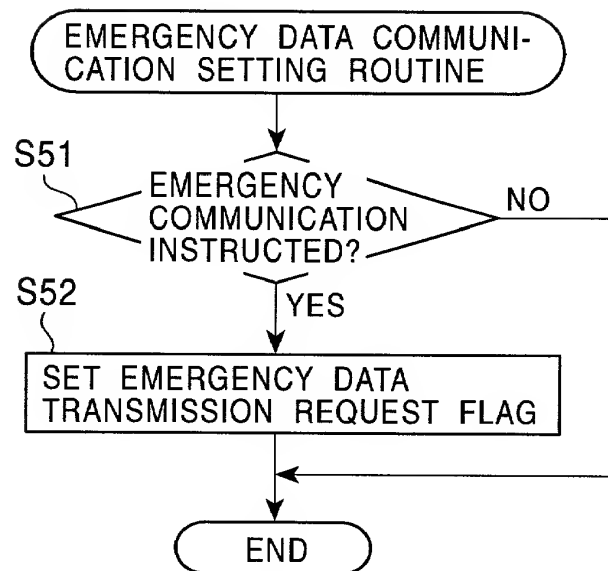


FIG. 13

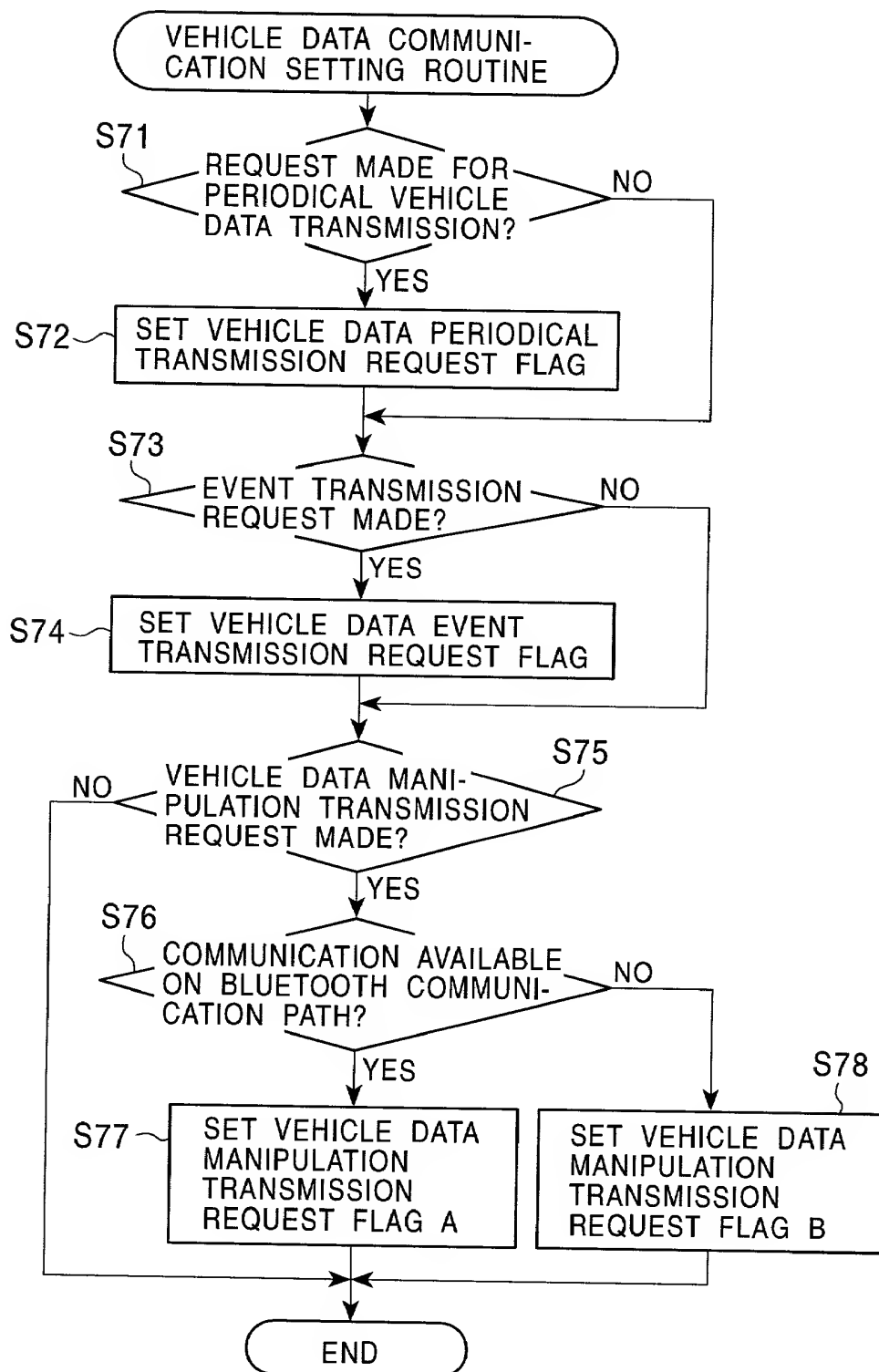


FIG. 14

| TYPE | UPDATE CYCLE | PRECEDING UPDATE DATE AND TIME |
|-------------------|----------------------------|-----------------------------------|
| VEHICLE DATA | ONE WEEK | XXXX : YY : ZZ 12:10 |
| DRIVER DATA | START OF VEHICLE | XXXX : YY : ZZ 11:03 |
| MUSIC DATA | TWICE A DAY | XXXX : YY : ZZ 12:00 |
| MAP DATA | ONCE A MONTH | XXXX : YY : ZZ 09:45 |
| TRAVELING DATA | EVERY 10 MINUTES | XXXX : YY : ZZ 12:50 |
| ADDRESS BOOK DATA | ONCE A DAY | XXXX : YY : ZZ 10:10 |
| EMERGENCY DATA | OCCURRENCE OF EMERGENCY | XXXX : AY : GH 17:30 |

FIG. 15

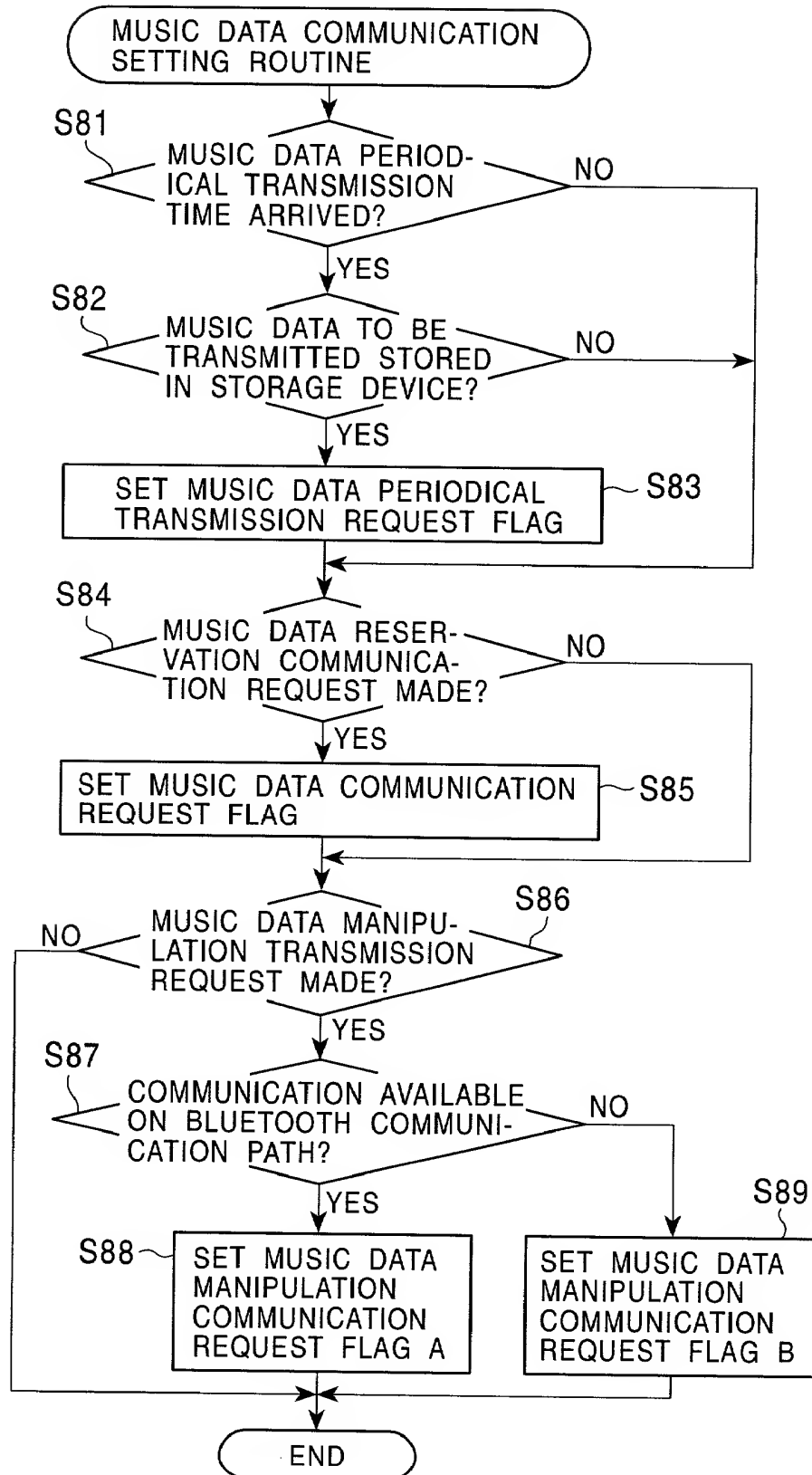


FIG. 16

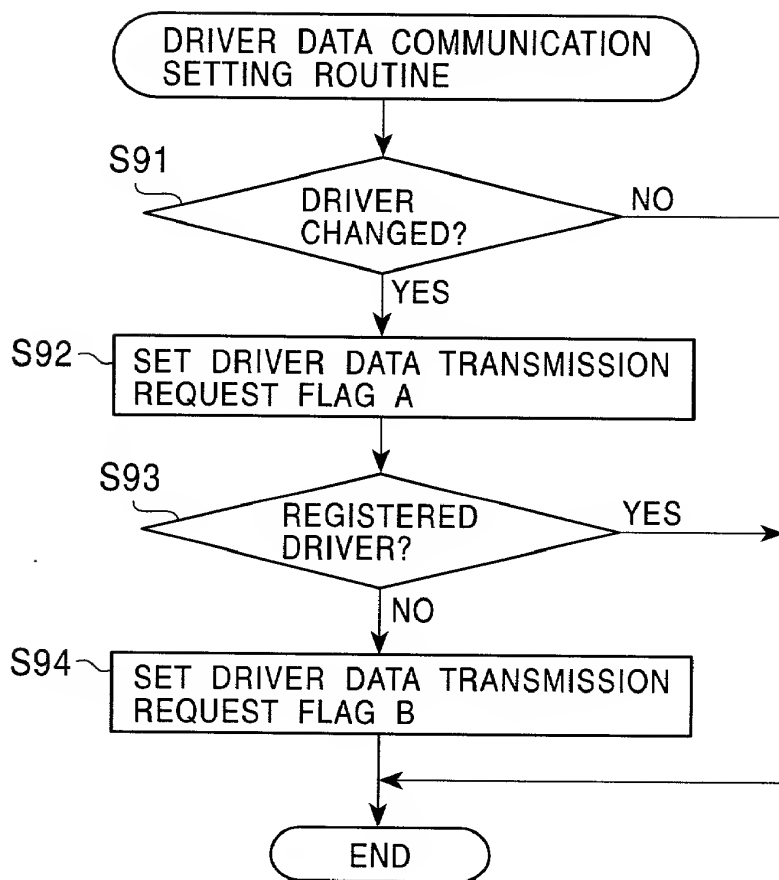


FIG. 17

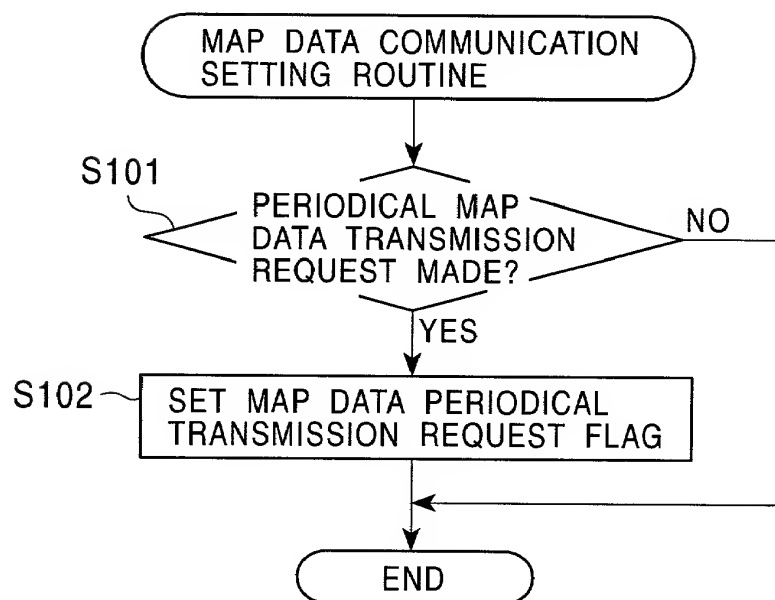


FIG. 18

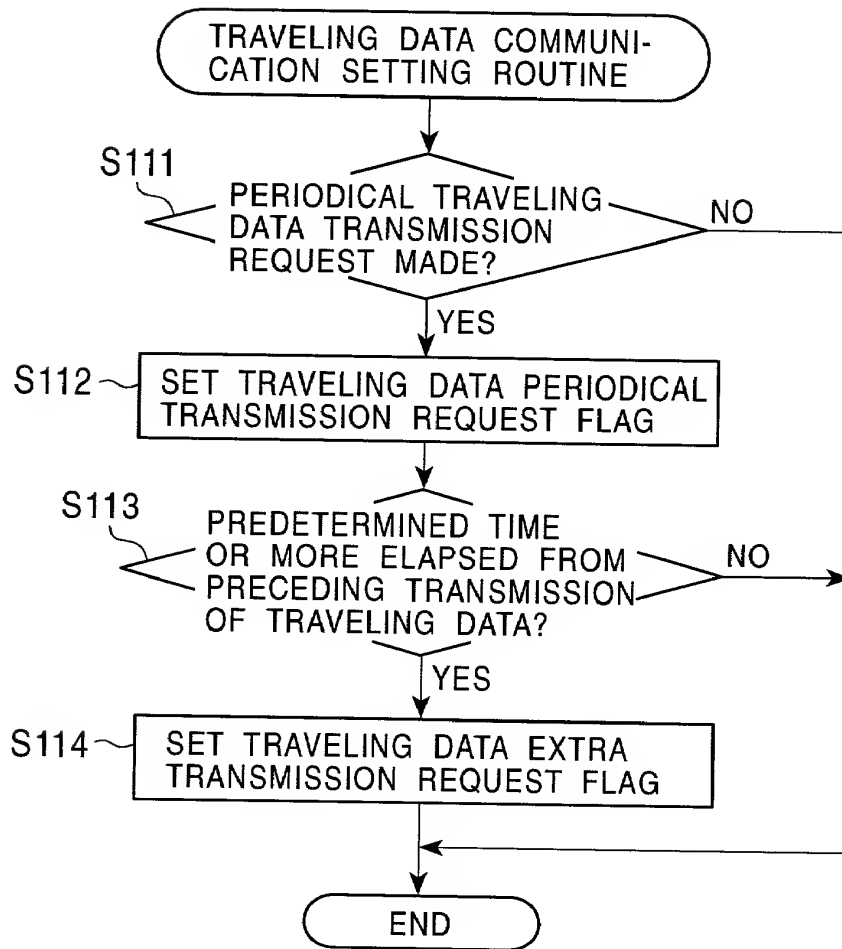


FIG. 19

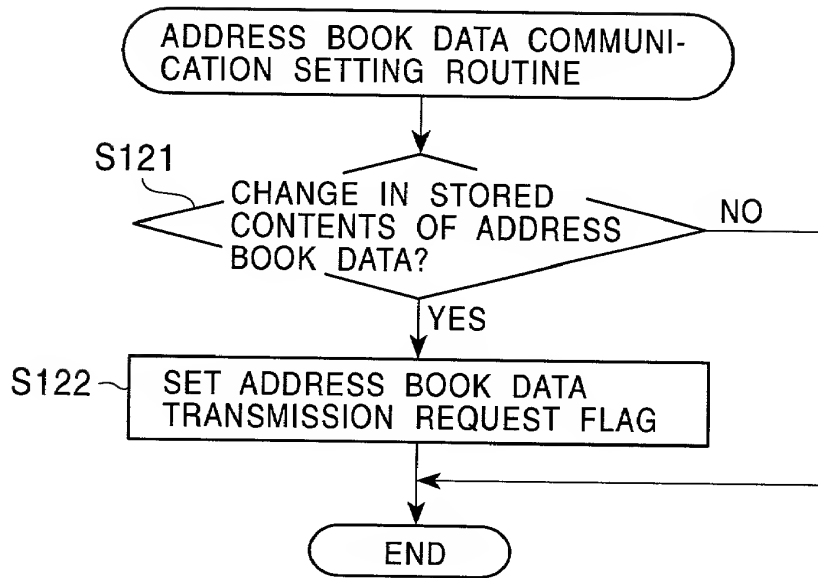


FIG. 20

| DEVICE OR SERVER TYPE | VEHICLE MANAGEMENT CENTER DEVICE | TRAVELING MANAGEMENT CENTER DEVICE | HOME SERVER | OFFICE SERVER | MUSIC DELIVERY CENTER DEVICE | EMERGENCY MESSAGE CENTER DEVICE |
|-----------------------------|-------------------------------------------|---------------------------------------------|----------------|------------------|---------------------------------------|------------------------------------------|
| VEHICLE DATA | O | O | O | O | X | O |
| DRIVER DATA | O | O | O | O | O | O |
| MUSIC DATA | X | X | O | O | O | X |
| MAP DATA | X | O | O | O | X | O |
| TRAVELING DATA | O | O | O | X | X | O |
| ADDRESS BOOK DATA | X | X | O | O | X | X |
| EMERGENCY DATA | X | X | O | X | X | O |

FIG. 21

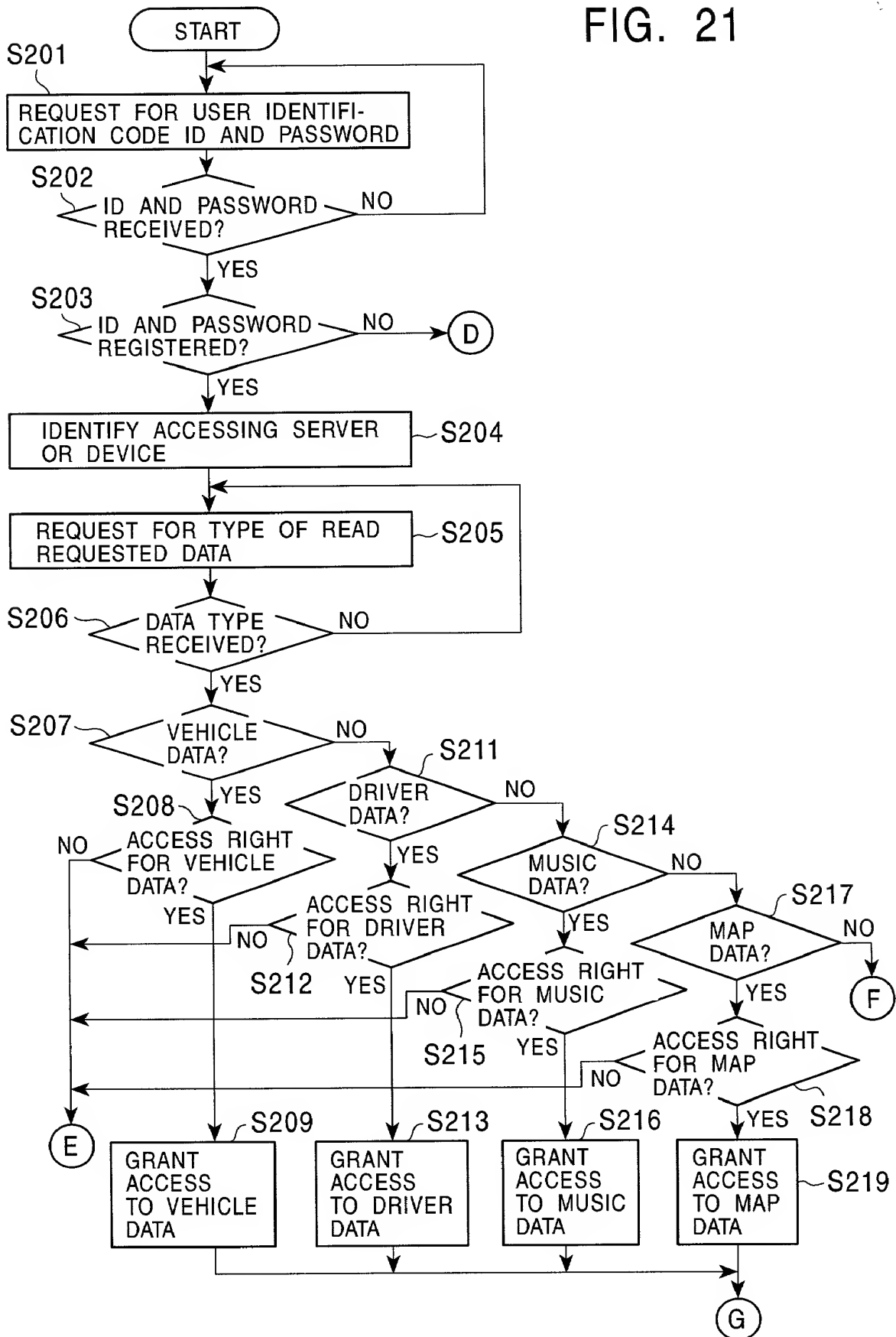


FIG. 22

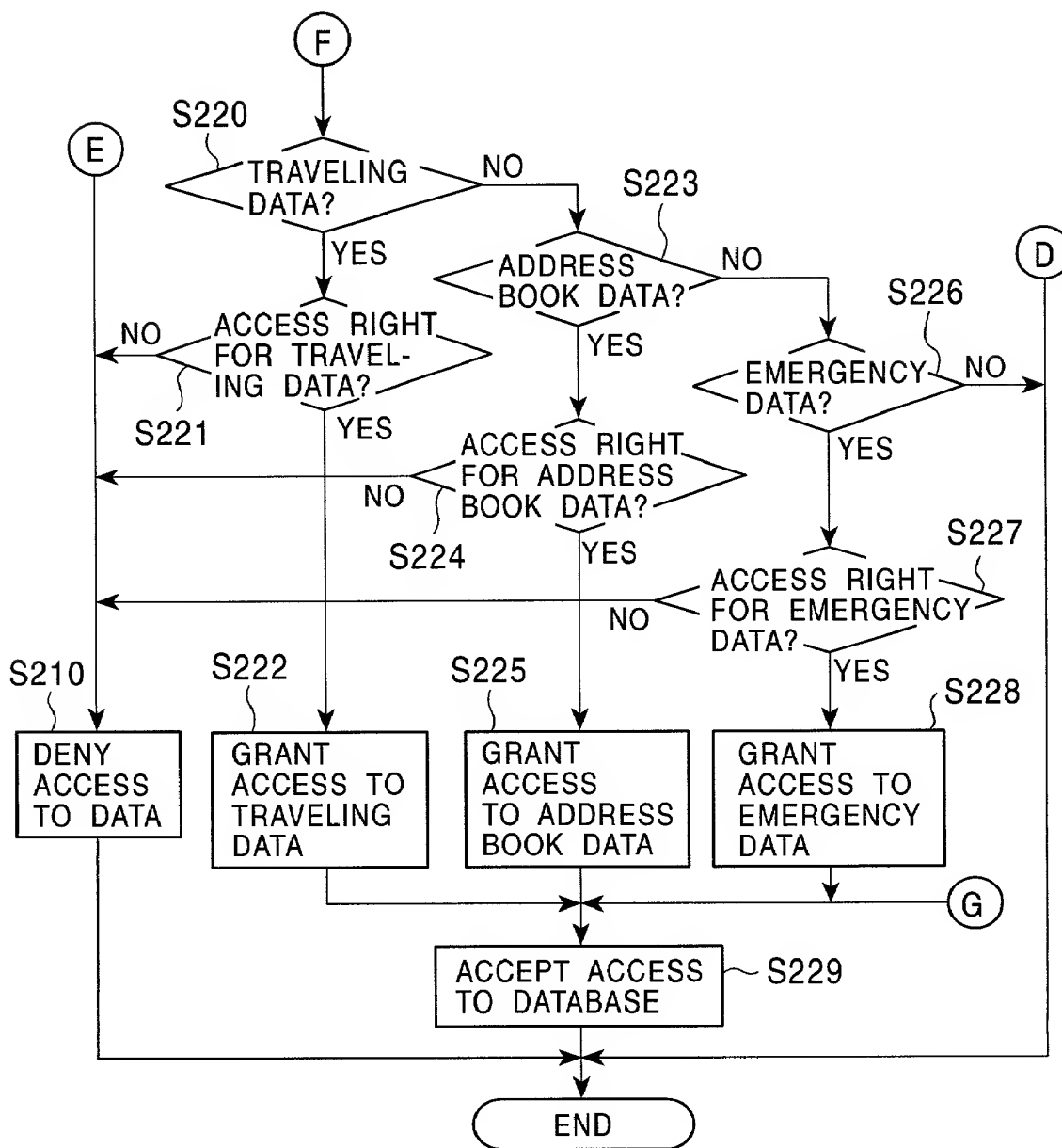


FIG. 23

| <div>USER GROUP</div> <div>TYPE</div> | OWNER | FAMILY MEMBER | FRIEND | SECURITY COMPANY | POLICE | FIRE STATION | REPAIR SHOP |
|---------------------------------------|-------|---------------|--------|------------------|--------|--------------|-------------|
| VEHICLE DATA | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| DRIVER DATA | ○ | ○ | ○ | ○ | × | ○ | × |
| MUSIC DATA | ○ | × | ○ | × | × | × | × |
| MAP DATA | ○ | ○ | ○ | ○ | ○ | × | × |
| TRAVELING DATA | ○ | ○ | × | × | × | × | ○ |
| ADDRESS BOOK DATA | ○ | × | × | × | × | × | × |

FIG. 24

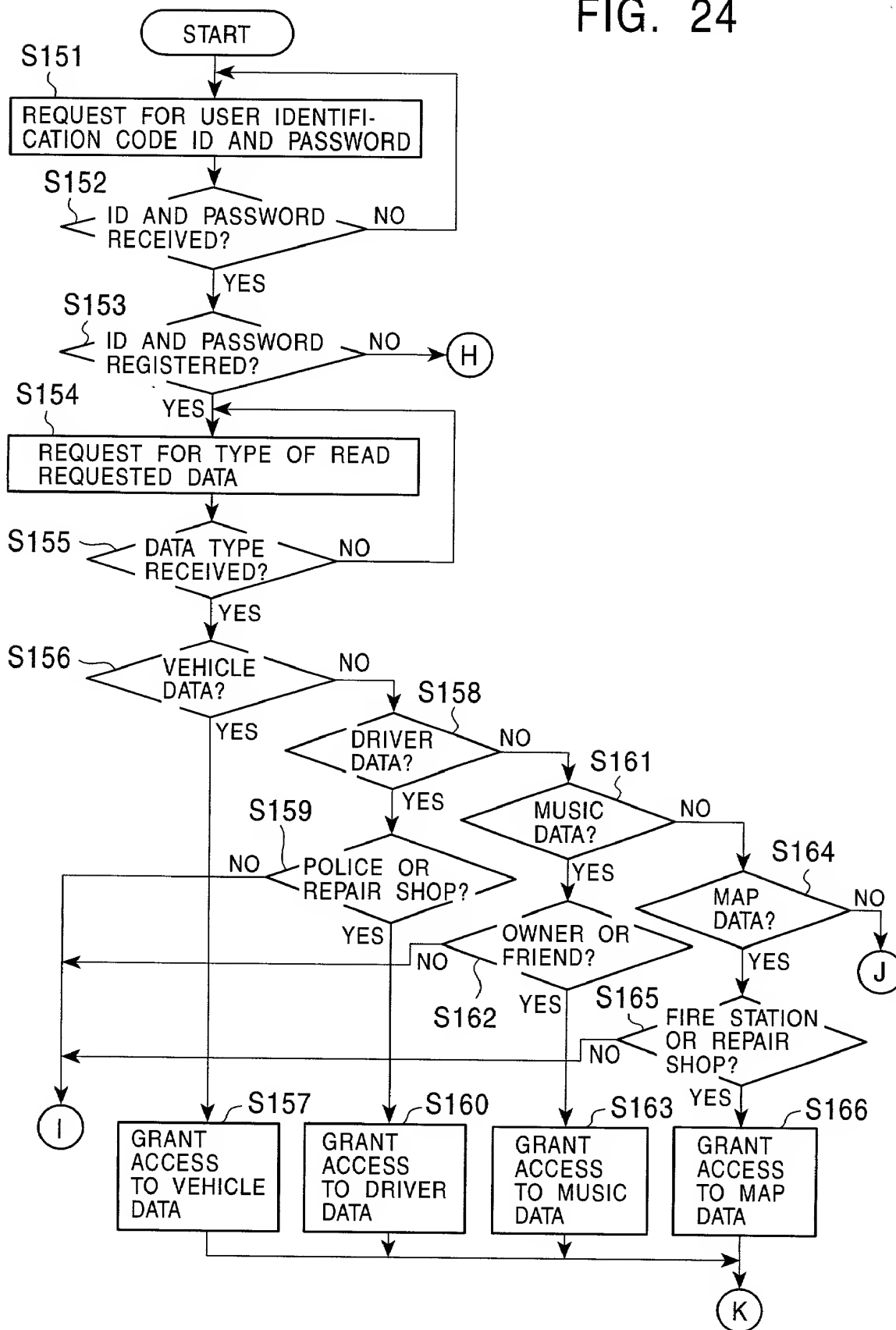


FIG. 25

